

THE Canadian Medical Review.

EDITORIAL STAFF:

W. H. B. AIKINS, M.D.,
Physician to Toronto General Hospital.

A. B. ATHERTON, M.D.,
Surgeon to General Hospital, Fredericton, N.B.

J. FERGUSON, M.D.,
Physician to Western Dispensary.

ALBERT A. MACDONALD, M.D.,
Gynaecologist to Toronto General Hospital.

G. STERLING RYERSON, M.D.,
Oculist and Aurist to Toronto General Hospital.

ALLEN BAINES, M.D.,
Physician to Hospital for Sick Children.

Vol. VIII.

TORONTO, SEPTEMBER, 1898.

No. 3

Original Communications.

The Significance of Pain in Gynaecological Diagnosis.

Translated and condensed from *La Gynécologie*.

By ERNEST HALL, M.D., Fellow of Bt. Gyn. Ass'n., Victoria, B.C.

In the department of gynaecology, pain is a symptom of no little importance. It is frequently exaggerated by the sensitiveness, irritability and the sedentary life which many women follow. On the other hand, it is not rare to see some of the most painful conditions borne with apparent ease by those in the lower walks of life who are compelled to do manual labor, or in those in better circumstances, who, by peculiar temperament, or by determined will are able to control their feelings and to suppress any manifestations of suffering. Of these two classes the former contributes the greater number of our patients. It may be that there is a variety of pain of an emotional nature, or it may be that the peripheral impressions react too acutely upon the centres of sensation in the lumbo-sacral plexus. In order that we may understand the remote effects, the radiated pains and reflex spasms that lesions of the uterus and adnexa give rise to, we must remember that the genital organs have in this plexus a direct centre of sensation, and through the abdominal sympathetic are connected with all the neighboring

organs as well as with the nerve trunks of the epigastrium, loins, and lower extremities.

The painful spasms and uterine colic of young and delicate females depend principally upon a mechanical obstacle—congestive and inflammatory thickening of the mucous membrane upon which the muscle exerts its force in order to expel clots or masses of mucus. The pain is due to the contact of the substance to be expelled with the morbidly irritable and hyperæsthetic mucous membrane. The muscle also may partake of the morbid sensibility without inflammation of that structure being present.

In the early period of pregnancy we see in the sensations of tension and pain, the effects of the weight of the uterus and the stretching of the ligaments; in certain cases lumbar or lumbar-sacral fatigue caused by the irritation of sensitive filaments located in the utero-sacral ligaments. Ovarian pain resembling true neuralgia is frequent in the later months of pregnancy caused by the pressure exercised by the hard parts of the foetus against the sensitive coccygean nerve filaments. Radiations of this variety of pain are frequent upon the lower limbs, loins, abdomen and back. Chronic inflammations, hyperplasias, or tumors of the genital organs give similar sensations, which are increased by any morbid condition of the nerves included in the affected parts.

The importance of pain as a symptom in disease of the female genital organs should not be underrated, for it is largely by the intensity of this symptom that our patients measure the gravity of their complaints. It is sometimes more difficult to convince a patient who presents a painless epithelioma of the cervix of the necessity of surgical interference, than one suffering from citrical contraction secondary to periovaritis. We frequently see patients who, when informed of the urgent necessity of the removal of the diseased part, hesitate, and refuse to accept radical measures until the presence of pain impels them to return and submit to a second examination, when, too often, the disease has extended beyond the limits of possible cure.

On the other hand, pain is of no little import to the patient. A woman who continues to suffer after an operation cannot be expected to consider herself cured. How many deficiencies in the results of operative treatment depend upon the fact that the gynæcologist has neglected some detail in relation to the painful symptoms experienced by the patient! However subjective a symptom may be, we must agree that it finds its origin, its pretext, if you please, in some anomaly of pathological order. However minute this pretext may be, compared with the exaggerated sensations experienced by the patient, it is most important that it should disappear.

In passing, we may note that Charcot, Féré, and other neuro-pathologists, have described ovarian pain, and have refused to consider it as a special indication of a general morbid condition. It is not always the ovary that suffers in this condition. There is present a painful neuralgic point, analogous to those of neuralgia, generally located perhaps within the muscles of the abdominal wall.

VARIETIES IN PAIN.

That which we shall call varieties of pain represents sensations differently experienced by patients, depending upon many conditions which are described in almost identical language. Thus colic represents spasm nor uterine tenesmus, the painful expulsive effort. "Painful Points" correspond in a precise manner to certain fixed neuralgias, sometimes deep, sometimes superficial but localized; the sensations of weight, stretching, tension, weariness, and that of the presence of a foreign body coincide with the increase in volume or prolapse of the uterus, excessive congestion of the cervix or retroversion.

Painful contractions of the anus or bladder,—true reflex tenesmus of these organs are frequently associated with and dependent upon genital affections.

Localized pain of a burning character usually indicates chronic vulvigo-ovaritis, or cervical parametritic adhesions resulting from a deep tear of the neck. This pain may be peripheral corresponding to the nervous connection.

Pain over the kidneys frequently indicates disease of the cervix or in the neighborhood of the utero-sacral ligaments.

In addition there are pains apparently without any material basis in the condition of the sexual organs. Their character is that of being variable in location and intensity, occurring in paroxysms sometimes periodic, at other times in connection with manifestations of similar nature as migraine or gastralgia. They are frequently accompanied with painful throbbings in the deeper parts of the pelvis, resembling a pulsating frontal or temporal neuralgia.

For convenience we shall adopt the following order in the discussion of the various manifestations of pain :

1. *Duration* : Continuous, paroxysmal, intermittent or periodic.
2. *Location* : Deep or superficial, general or localized, unilateral or bilateral.
3. *Character* : Dull, lancinating, neuralgic or spasmodic.
4. *Clinical aspect* : Spontaneous or caused by examination.

UTERINE PAIN.

In metritis pain is universally recognized. Dubois has described a condition of the uterus in which pain is alone the only abnormality desirable—a hyperæsthesia sometimes diffused, at other times more localized in the cervical region. The dysmenorrhœa of neuroæsthenics temporarily exhibits this condition.

The following classification will be found convenient for description :

- (a) Spontaneous uterine pain.
- (b) Pain caused by direct contact, or by examination.
- (c) Pain of a chronic neuralgic character associated with traumatism.
- (d) Uterine spasm and periuterine pain of variable reflex origin.

(a) SPONTANEOUS UTERINE PAIN.

- (a) Painful spasms of menstruation.

Pain of this character is present in :

- (1) Young females of a highly-nervous constitution.
- (2) Those of a rheumatic taint, and those subject to neuralgias, especially migraine.

(3) Those of a lymphatic or debilitated constitution. The excessive tumefaction of the uterine mucosa during menstruation, owing to the feeble resistance of the tissues explains the painful sensations which are produced at the moment of excretion of the blood.

The pain occurs in these different conditions at the period of predisposition to neuralgic or spasmodic phenomena menstruation, when the canal is obstructed with turgid membrane, or by flexion due to an atrophied zone, or by a leucorrhœal secretion, increased previous to the flood, or by difficult excretion of mucous after the flood, by spasmodic reaction of the uterus, and varied reflexes.

The pain experienced during accouchement appears interesting here by way of comparison. The nervous distribution in the genitive organs is such that the sensitive impressions proceed parallel with the involuntary reflex contractions, and also with voluntary efforts.

In the period of dilatation the pain is due to stretching of the nerves of the cervix and upper part of the vagina, this being the most sensitive zone of the canal. The reflex uterine contractions are also the result of impressions localized at this point. In this mechanism we have exhibited uterine colic in its most complete form. More widely distributed reflexes also result from similar irritation. Circulatory and digestive disturbances, pallor, syncope, nausea, vomiting and also

alterations of the central nervous system, cerebral excitement, etc., indicate the nature and location of these reflexes. In extreme cases occlusive spasm of the cervical sphincter may result in temporary suspension of labor.

If these observations be correct it follows that those women who suffer abnormally during childbirth, suffer abnormally during menstruation. The researches which have been made in this direction have confirmed this conclusion.

The moment that the foetal head passes the cervical orifice dilated to its maximum extent, is the moment of most severe pain during the period of labor. This is also the stage of most active reflexes. But immediately this point in labor has passed, the distant reflexes disappear and the pain assumes a different aspect, more in keeping with the general sensitiveness and the sympathetic action is confined to the uterus itself to sustain and assist the expulsive efforts.

We thus have sufficient evidence to locate the painful spasms of menstruation in the cervical zone of the uterus, and more definitely in pericervical plexus which also penetrates the isthmus and upper part of vagina.

(b) PAIN CAUSED BY DIRECT CONTACT OR BY EXAMINATION.

Pain caused by contact has a double location—the cervix and fundus. The cervix in the normal condition is generally painless to the finger of the examiner. But in certain women the touch or simple pressure causes pain. Taking hold of the cervix with a tenaculum, in most cases, is not painful, but occasionally it causes acute pain. This painful condition is often associated with other hyperæsthetic conditions, as sensitiveness of the normal ovaries, contraction of the vulvæ, etc., which exists without any inflammation of the tissues.

The sensitiveness of the cervical canal varies greatly in different subjects, being greatly increased in certain nervous cases. The passage of the uterine sound when done with care is usually possible in those women whose sensitiveness is not altered. Even when cervicitis is present this simple operation may be painless. But in some cases of a decidedly neurotic temperament most acute pain and intense reflex phenomena result. The pain is sometimes so severe that she throws herself back with a sharp cry, and temporary cerebral derangement such as would be produced by fear or emotion. Occasionally the patient becomes pale, complains of pericordial constriction, palpitation, with a tendency to fainting, the face and hands become covered with perspiration, and frequently vomiting follows.

As a further illustration of the reflexes and of the sensitiveness of

the os internum, we may note the results of the os under chloroform, when the patient is of the neurotic type. Using Hegar's sounds we notice that when we reach the point when considerable effort is required to overcome the resistance, the pulse alters, respiration becomes irregular, and perhaps momentarily ceases. Contractile spasm may appear and the sound which had already passed easily is with difficulty reinserted.

The action of a faradic current of high tension, obtained from an ordinary induction coil and applied by the bipolar method causes a rapid reduction of the sensibility of the uterus, but when the current is of low tension an increase of the sensitiveness results. The direct current is generally borne without marked discomfort.

(c) PAIN OF A CHRONIC NEURALGIC CHARACTER, ASSOCIATED WITH TRAUMATISM.

To Emmet we owe the explanation of the painful conditions resulting from lacerated cervix, especially when complicated with inflammatory changes. Even after the laceration has apparently disappeared pain of a persistent neuralgic character frequently persists. This is explained by the fact that during the process of repair small nervous filaments become imbedded and compressed in the dense cicatrix. The pain from this condition is unilateral and of a tearing or lacerating nature. If the patient is subject to neuralgia or migraine, the painful point is often located at the neck of the uterus. The rhythmical pulsations are felt, and the observer's finger can easily locate the painful point.

This variety of pain is often wrongly attributed to ovaritis or to parametric adhesions.

In antiflexion menstruation is always painful and difficult. It is probable that the menstrual spasm finds an additional element in this condition so common in nervous and debilitated subjects.

(d) UTERINE SPASM AND PERIUTERINE PAIN OF VARIABLE REFLEX ORIGIN.

The causes which produce a condition of extreme irritability in the genital organs of certain women are many. This irritability manifests itself in muscular spasms and acutely painful sensations.

The most common of these causes is the apprehension that the patient experiences at the moment of examination, especially if she be a virgin or nullipare, or if it be her first examination. Other causes are affections of the vulva, excoriations, lacerations, etc. Urethral

polypi may cause vaginal spasm, rendering examination absolutely impossible, severe dysuria may also result from such irritation.

The neuropathic disposition of many patients is sufficient of itself to produce painful reflexes at the beginning of an examination by the physician. One is astonished at times to encounter at a level with the cul-de-sac the parts resistant, fixed and painful, giving the impression of dense parametric adhesions. After waiting a few minutes until the patient becomes composed and accustomed to the manipulation the phantom adhesions vanish and the morbid condition gives place to the normal.

The use of cocaine greatly diminishes the irritation produced by contact with the examiner's finger.

LYCETOL. A HINT ON THE TREATMENT OF RENAL CALCULI.—There is a certain class of cases of renal calculi in which much benefit is derived from the internal administration of antilithic remedies. These are cases where the calculus has not reached any considerable size, and is composed for the most part, of uric acid. The demand for a remedy that will disintegrate concretions of uric acid in the kidney, and facilitate their elimination in the urine, has however, been only imperfectly realized by the alkalies which have been chiefly employed for this purpose. While alkalies, especially lithium salts, undoubtedly exert a solvent action upon uric acid, this is not sufficiently marked to render it likely that they will dissolve stone in the kidney. A much more promising remedy seems to be Lycetol, which has a specific solvent action upon uric acid, as shown in the decided increase in the quantity of this substance excreted in the urine after its administration. Lycetol is also well adapted for prolonged use in renal lithiasis, since it is extremely pleasant to take and does not disturb the stomach. Dr. James H. Taylor, of Indianapolis, writes that in cases of renal calculi he has employed this preparation with very gratifying results, and others are equally positive in their statements regarding its value in all forms of the uric acid diathesis.—*Memphis Medical Monthly*.

DR. LAPHORN SMITH has returned to Montreal from Europe, where he has been studying all summer. Following the example of the European gynecologists, he is forming a post graduate class limited to six practitioners, each course of demonstrations lasting one month.